

-2-

IN THE CLAIMS

1. (Previously Presented) A digital data processing system for determining clinical outcomes of medical data, the digital data processing system comprising:

an input mechanism receiving sets of medical information from at least one user having an associated privilege level, each set of medical information having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

a storage mechanism coupled to the input mechanism, the storage mechanism receiving and maintaining the plurality of sets of medical information;

a processor coupled to the storage mechanism, the processor receiving a selection of a first characteristic and a second characteristic common to at least two sets of medical information, and processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome of the sets of medical information for the specific medical study based upon a comparison of the selected first and second characteristics, wherein the clinical outcome provides an indication of a performance of the doctor for at least one of a specific drug, a specific patient, a specific treatment technique and a specific ailment in comparison to at least one other doctor, the processor configured to determine a relative privilege level of a user; and

an output mechanism coupled to the processor to receive the clinical outcome of the sets of medical information and to conditionally output the clinical outcome to the user of the digital data processing system, the processor determining conditional output of the clinical outcome depending upon the associated relative privilege level of the at least one user, such that the at least one user may depend upon the clinical outcome during the course of the medical study and the processor presenting, on the output mechanism, a first user having a higher privilege level a first portion of the clinical outcome and presenting a second user having a lower privilege level a second portion of the clinical outcome, the second portion of the clinical outcome different from the first portion of the clinical outcome.

-3-

2. (Previously Presented) The digital data processing system of claim 1 wherein:
the sets of medical information containing characteristics related to the specific medical study include data related to at least one of a patient, a drug, an ailment, a doctor and a treatment technique; and
wherein a level of processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome is selected based upon the privilege level of the user and wherein the clinical outcome determined based upon the selected first characteristic indicates a statistical result derived from the clinical algorithm for at least one of a patient, a drug, an ailment and a doctor in relation to another of at least one of a patient, a drug, an ailment and a doctor.
3. (Canceled)
4. (Canceled)
5. (Previously Presented) The digital data processing system of claim 1 wherein the first characteristic is an identity of at least one drug and wherein the second characteristic is an identity of at least one other drug, and wherein the clinical outcome provides an indication of a performance of the at least one drug for treating at least one patient in comparison to the at least one other drug in relation to doctors treating patients.
6. (Previously Presented) The digital data processing system of claim 1 wherein the first characteristic is an identity at least one first doctor and wherein the second characteristic is an identity of at least one second doctor, and wherein the clinical outcome provides an indication of a performance of the at least one first doctor in comparison to the at least one second doctor as related to at least one of:
- i) treatment of at least one patient;

-4-

- ii) treatment of at least one ailment;
- iii) use of at least one drug; and
- iv) the success of at least one surgical technique; and

wherein the digital data processing system comprises:

means for displaying results of the clinical outcome only if a privilege level of the user is sufficient to allow that user to view the performance of the at least one first doctor in comparison to the at least one second doctor.

7. (Previously Presented) The digital data processing system of claim 1 wherein the processor instructs the input mechanism to receive specific sets of medical information based upon an identity of a user of the digital data processing system and wherein the clinical algorithm for which all values of the first and second characteristics are processed is selected based upon the identity of the user of the digital data processing system, such that there are two users for which output of the clinical algorithm is different and the two users are a doctor and a director of a medical practice group of doctors that includes the doctor, and wherein the output of the clinical algorithm presented to the doctor is filtered as compared to the output of the same clinical algorithm presented to the director of the group of doctors that includes the doctor.

8. (Previously Presented) The digital data processing system of claim 1 wherein:

the input mechanism is coupled to a computer network including attached geographically diverse patient and doctor computer systems, and wherein the user of the digital data processing system is a patient who enters at least one of the sets of medical information as input from a patient computer system which is remotely located from the digital data processing system; and

wherein the output mechanism provides only a portion of the clinical outcome to the patient over the network immediately after processing the data, thereby providing the portion of the clinical outcome offering immediate feedback in response to entering patient data that takes into account the most up-to-date

-5-

sets of medical information, the portion containing only clinical outcome data that the patient is allowed to view based upon the privilege level assigned to the patient.

9. (Previously Presented) The digital data processing system of claim 1 wherein the processor analyzes the clinical outcome for specific triggering events and notifies at least one of a doctor and an allied medical professional upon detection of a specific triggering event that is determined based on the analysis of the clinical outcome.

10. (Previously Presented) A method for implementing medical studies, the method comprising the steps of:

- obtaining an identification of a user and an associated privilege level of the user;

- selecting a medical study;

- entering medical data related to a patient associated with the medical study;

- immediately processing the medical data entered in combination with other data associated with the medical study using a clinical algorithm specifically designed for the medical study to produce a clinical outcome of the medical study which takes into account the medical data entered that was related to the patient, wherein the clinical outcome provides an indication of a performance of the doctor for at least one of a specific drug, a specific patient, and a specific ailment in comparison to at least one other doctor;

- determining a relative privilege level of the user; and

- immediately and conditionally, based on the relative privilege level of the user, outputting at least a portion of the clinical outcome data once processed to provide an indication as to how the medical data that was entered for the patient effects, and is related to, the outcome of the medical study in relation to the comparison of doctors, and to present a first user having a higher privilege level

a first portion of the clinical outcome and to present a second user having a lower privilege level a second portion of the clinical outcome, the second portion of the clinical outcome different from the first portion of the clinical outcome.

11. (Canceled)

12. (Previously Presented) The method of claim 10 wherein the step of selecting a medical study includes the steps of:

presenting to the user a list of medical studies for which that user is associated and to which the privilege level of that user corresponds, thereby focusing attention of the user on particular medical studies;

allowing the user to select one of the medical studies for which that user is associated; and

upon a determination that the identification of the user indicates the user is a doctor, then presenting to the doctor a list of patients associated with the medical study and allowing the doctor to select a current patient associated with the medical study and enter a new patient to be associated with the study, and upon a determination that the identification of the user indicates that the user is a medical director, then presenting to the medical director a series of privileged clinical outcome studies that can provide a ranking of doctors against other doctors for the treatment of patients.

13. (Previously Presented) The method of claim 10 wherein the step of immediately processing the medical data entered using a clinical algorithm executes the clinical algorithm to produce at least one of:

i) a comparison of doctors for treatment of an ailment;

ii) a comparison of drugs for treatment of an ailment;

iii) a comparison of physician groups for treatment of an ailment;

iv) a comparison of surgical techniques for treatment of an ailment; and

wherein the method comprises the step of:

displaying results of the clinical outcome only if a privilege level of the user is sufficient to allow that user to view the results of the clinical outcome.

14. (Original) The method of claim 10 wherein the step of entering medical data further includes the steps of:

- presenting a first question related to the selected medical study to an individual;

- retrieving an answer to the question;

- presenting a second question related to the selected medical study to the individual, wherein the second question presented is determined by the answer retrieved in response to the first question; and

- repeating the steps of presenting a first question, retrieving an answer and presenting a second questions, such that a series of questions are presented to the individual which are governed by the answers received in response to former questions.

15. (Previously Presented) The method of claim 10 wherein the step of immediately processing the medical data using a clinical algorithm further includes the steps of:

- executing the clinical algorithm to determine if the medical data entered does not conform, within a predetermined threshold, to a standardized set of medical data associated with the medical study, and if so, automatically processing a trigger event that prepares a prescription for an individual associated with the medical study.

16. (Previously Presented) The method of claim 15 wherein the trigger event is processed for a doctor and wherein the processor, in response to processing the trigger event, notifies the doctor that a patient has entered medical data that does not conform to the predetermined threshold of the standardized set of medical data associated with the medical study and wherein the step of preparing a

prescription prepares a prescription for a drug for the patient on behalf of the doctor.

17. (Previously Presented) The method of claim 15 wherein the trigger event is processed for a patient and a doctor and wherein the processor, in response to processing the trigger event, notifies the patient and the doctor that the patient has entered medical data that does not conform to the predetermined threshold of the standardized set of medical data associated with the medical study and that the patient should seek medical treatment and that the doctor should prescribe medical treatment.

18. (Previously Presented) The method of claim 15 wherein the trigger event is processed based upon an anticipated timing of data entry associated with the medical study and wherein the trigger event automatically processes a prescription on behalf of a doctor treating a patient associated with the trigger event.

19. (Canceled)

20. (Previously Presented) A computer program product having a computer-readable medium including computer program logic encoded thereon for determining clinical outcomes of medical data, such that the computer program logic, when executed on at least one processing unit with a computing device, causes the at least one processing unit to perform the steps of:

- receiving sets of medical information, each set having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

- obtaining an identification of a user and an associated privilege level of the user operating the computer system

- maintaining the plurality of sets of medical information;

immediately receiving a selection of a first and second characteristics common to at least two sets of medical information, and immediately processing all values of the first and second characteristics according to a clinical algorithm to determine a clinical outcome of the sets of medical information for the specific medical study based upon the selected first characteristic, wherein the clinical outcome provides an indication of a performance of the doctor for at least one of a specific drug, a specific patient, and a specific ailment in comparison to at least one other doctor;

determining a relative privilege level of the user; and

immediately and conditionally, based on the relative privilege level of the user, outputting at least a portion of the clinical outcome to allow the clinical outcome to be used in a state that accounts for the sets of medical information received and to present a first user having a higher privilege level a first portion of the clinical outcome and to present a second user having a lower privilege level a second portion of the clinical outcome, the second portion of the clinical outcome different from the first portion of the clinical outcome.

21. (Previously Presented) A method performing medical diagnosis, the method comprising the steps of:

receiving sets of computerized medical study data;

receiving an identity of a user having an associated privilege level;

providing feedback used to effect treatment of a patient associated with at least one of the sets of computerized medical data received;

determining a relative privilege level of the user;

generating comparison results describing comparisons of the sets of computerized medical study data to produce a medical study profile, wherein the medical study profile provides an indication of a performance of the doctor for at least one of a specific drug, a specific patient, and a specific ailment in comparison to at least one other doctor and wherein content of the medical study profile is produced at a level according to the relative privilege level of the user

-10-

and only contains doctor ranking information upon determination that the relative privilege level is sufficiently high enough to allow that user to rank doctors against other doctors and contains ranking of a non-doctor characteristic upon determination that the relative privilege level is not sufficiently high enough to allow that user to rank doctors; and

based on the medical study profile, providing an indication of a ranking of a characteristic of the medical study profile.

22. (Original) The method of claim 21 wherein the step of providing an indication of the ranking provides an indication of a risk assessment of any set of computerized medical study data that contains a characteristic that does not conform, within a predetermined threshold, to a standardized characteristic in a typical set of computerized medical study data.

23. (Previously Presented) The method of claim 22 wherein the step of providing an indication signals a trigger event for at least one of a doctor responsible for treating a patient, and a medical professional associated with the patient, the trigger event notifying the at least one of the patient, the doctor, and the medical professional of the non-conforming characteristic.

24. (Canceled)

25. (Original) The method of claim 21 wherein certain of the sets of computerized medical data include a set of answers to a set of questions related to a particular person associated with the medical study; wherein the medical study profile includes a typical set of answers to the set of questions; and wherein the step of generating includes, for each set of computerized medical study data, the step of:

comparing the set of answers related to the particular person to the typical set of answers to the set of questions; and

based upon the comparison of the set of answers to the typical set of answers, providing a ranking indicative of a deviation of the set of answers from the typical set of answers.

26. (Previously Presented) The method of claim 25 wherein the particular person is a doctor having an associated sufficient privilege level and the ranking indicates a relationship of the performance of the doctor in relation to the medical study data in comparison to at least one other doctor.

27. (Previously Presented) The method of claim 25 wherein the particular person is a patient and the ranking indicates a level of treatment provided to the patient relation to the medical study data for a doctor treating that patient in relation to at least one other doctor.

28. (Currently Amended) A method for determining clinical outcomes of medical data, the digital data processing system comprising:

- receiving sets of medical information, each set having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

- receiving an identity of a user having an associated privilege level;

- maintaining the plurality of sets of medical information;

- determining a relative privilege level of the user;

- selecting first and second characteristics common to at least two sets of medical information, and immediately processing all values of the first and the second characteristic, including the first and second characteristic in the sets of medical information received, according to a clinical algorithm to determine a clinical outcome containing privileged information dependent on the relative privilege level of the user, the privileged information including at least one of a risk assessment, a performance rating, and a treatment rating, for the sets of medical information for the specific medical study based upon the selected first

-12-

and second characteristic to indicate a ranking of at least two doctors in comparison to each other; and

immediately outputting the clinical outcome to allow the clinical outcome to be used during the course of the study to effect treatment of a patient associated with at least one of the sets of medical information received based upon the relative privilege level of the user;

wherein the sets of medical information containing characteristics related to the specific medical study include data related to at least one of a patient, a drug, an ailment, a doctor and a treatment technique;

wherein a level of processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome is selected based upon the privilege level of the user and wherein the clinical outcome determined based upon the selected first characteristic indicates a statistical result derived from the clinical algorithm for at least one of a patient, a drug, an ailment and a doctor in relation to another of at least one of a patient, a drug, an ailment and a doctor; and

wherein the first characteristic is an identity of at least one drug and wherein the second characteristic is an identity of at least one other drug, and wherein the clinical outcome provides an indication of a performance of the at least one drug for treating at least one patient in comparison to the at least one other drug in relation to doctors treating patients.

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Currently Amended) The method of claim 28 ~~claim 29~~ wherein the first characteristic is an identity at least one first doctor and wherein the second characteristic is an identity of at least one second doctor, and wherein the clinical outcome provides an indication of a performance of the at least one first doctor in comparison to the at least one second doctor as related to at least one of:

- i) treatment of at least one patient;
- ii) treatment of at least one ailment;
- iii) use of at least one drug; and
- iv) the success of at least one surgical technique wherein the digital data processing system comprises:

means for displaying results of the clinical outcome only if a privilege level of the user is sufficient to allow that user to view the performance of the at least one first doctor in comparison to the at least one second doctor..

34. (Currently Amended) ~~The method of claim 29~~ A method for determining clinical outcomes of medical data, the digital data processing system comprising:

receiving sets of medical information, each set having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

receiving an identity of a user having an associated privilege level;

maintaining the plurality of sets of medical information;

determining a relative privilege level of the user;

selecting first and second characteristics common to at least two sets of medical information, and immediately processing all values of the first and the second characteristic, including the first and second characteristic in the sets of medical information received, according to a clinical algorithm to determine a clinical outcome containing privileged information dependent on the relative privilege level of the user, the privileged information including at least one of a risk assessment, a performance rating, and a treatment rating, for the sets of medical information for the specific medical study based upon the selected first

-14-

and second characteristic to indicate a ranking of at least two doctors in comparison to each other; and

immediately outputting the clinical outcome to allow the clinical outcome to be used during the course of the study to effect treatment of a patient associated with at least one of the sets of medical information received based upon the relative privilege level of the user;

wherein the sets of medical information containing characteristics related to the specific medical study include data related to at least one of a patient, a drug, an ailment, a doctor and a treatment technique;

wherein a level of processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome is selected based upon the privilege level of the user and wherein the clinical outcome determined based upon the selected first characteristic indicates a statistical result derived from the clinical algorithm for at least one of a patient, a drug, an ailment and a doctor in relation to another of at least one of a patient, a drug, an ailment and a doctor; and

wherein content associated with the clinical outcome that is output is determined, in part, by an identity of a particular person who requests the clinical outcome such that there are two users for which output of the clinical algorithm is different and the two users are a doctor and a director of a medical practice group of doctors that includes the doctor, and wherein the output of the clinical algorithm presented to the doctor is filtered as compared to the output of the same clinical algorithm presented to the director of the group of doctors that includes the doctor.

35. (Previously Presented) The digital data processing system of claim 1 wherein:

a first user is a medical director and a second user is a doctor under management of the medical director; and

-15-

when under control of the medical director, the processor processes all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome of the sets of medical information that includes privileged information for viewing only by the medical director concerning performance of the doctor; and

when under control of the doctor, the processor processes all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome of the sets of medical information that does not include privileged information concerning performance of the doctor.

36. (Canceled)

37. (Previously Presented) The method of claim 10 wherein when processing the medical data to produce a clinical outcome of the medical study, the clinical outcome provides feedback used to effect treatment of a patient associated with the medical study.

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Previously Presented) The digital data processing system of claim 1 wherein the processor is configured to identify respective privilege levels associated with the first user and the second user for purposes of identifying how much of the clinical outcome can be presented to the first user and the second user, both of which can view at least some of the clinical outcome .

-16-

42. (Previously Presented) A method for determining clinical outcomes of medical data, the digital data processing system comprising:

- receiving sets of medical information, each set having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

- receiving an identity of a user having an associated privilege level;

- maintaining the plurality of sets of medical information;

- determining a relative privilege level of the user;

- selecting first and second characteristics common to at least two sets of medical information, and immediately processing all values of the first and the second characteristic, including the first and second characteristic in the sets of medical information received, according to a clinical algorithm to determine a clinical outcome containing privileged information dependent on the relative privilege level of the user, the privileged information including at least one of a risk assessment, a performance rating, and a treatment rating, for the sets of medical information for the specific medical study based upon the selected first and second characteristic to indicate a ranking of at least two doctors in comparison to each other; and

- immediately outputting the clinical outcome to allow the clinical outcome to be used during the course of the study based upon the relative privilege level of the user;

- the sets of medical information containing characteristics related to the specific medical study include data related to at least one of a patient, a drug, an ailment, a doctor and a treatment technique; and

- wherein a level of processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome is selected based upon the relative privilege level of the user and wherein the clinical outcome determined based upon the selected first characteristic indicates a statistical result derived from the clinical algorithm for at least one of a patient,

-17-

a drug, an ailment and a doctor in relation to another of at least one of a patient, a drug, an ailment and a doctor; and

wherein the first characteristic is an identity of at least one drug and wherein the second characteristic is an identity of at least one other drug, and wherein the clinical outcome provides an indication of a performance of the at least one drug for treating at least one patient in comparison to the at least one other drug in relation to doctors treating patients.

43. (Previously Presented) A method for determining clinical outcomes of medical data, the digital data processing system comprising:

receiving sets of medical information, each set having characteristics relating to a specific medical study and the characteristics of each set having an associated value;

receiving an identity of a user having an associated privilege level;

maintaining the plurality of sets of medical information;

determining a relative privilege level of the user;

selecting first and second characteristics common to at least two sets of medical information, and immediately processing all values of the first and the second characteristic, including the first and second characteristic in the sets of medical information received, according to a clinical algorithm to determine a clinical outcome containing privileged information dependent on the relative privilege level of the user, the privileged information including at least one of a risk assessment, a performance rating, and a treatment rating, for the sets of medical information for the specific medical study based upon the selected first and second characteristic to indicate a ranking of at least two doctors in comparison to each other; and

immediately outputting the clinical outcome to allow the clinical outcome to be used during the course of the study based upon the relative privilege level of the user;

-18-

the sets of medical information containing characteristics related to the specific medical study include data related to at least one of a patient, a drug, an ailment, a doctor and a treatment technique; and

wherein a level of processing all values of the first and second characteristic according to a clinical algorithm to determine a clinical outcome is selected based upon the relative privilege level of the user and wherein the clinical outcome determined based upon the selected first characteristic indicates a statistical result derived from the clinical algorithm for at least one of a patient, a drug, an ailment and a doctor in relation to another of at least one of a patient, a drug, an ailment and a doctor; and

wherein content associated with the clinical outcome that is output is determined, in part, by an identity of a particular person who requests the clinical outcome such that there are two users for which output of the clinical algorithm is different and the two users are a doctor and a user with a higher privilege level, and wherein the output of the clinical algorithm presented to the doctor is filtered as compared to the output of the same clinical algorithm presented to the user with the higher privilege level.